AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) An embolic material comprising a flowable, settable material, and a plurality of coated magnetically responsive particles disposed therein, the particles comprising cores of a magnetically responsive material between about 2 nm and about 20 nm in diameter, and a non-magnetically responsive layer around the core, an outside portion of which includes cleavable hydrophobic polymer chains, where the non-magnetic layer is sufficient thickly to give the particles a diameter of between about 20 nm and about 40 nm.

2. (Previously Presented) The embolic material according to claim 1 wherein the cores of the magnetic particles have a diameter between about 7 nm and about 15 nm.

3. (Previously Presented) The embolic material according to claim 2 wherein the layer is sufficiently thick to give the coated particles a diameter between about 25 nm and about 35 nm.

4. (Previously Presented) The embolic material according to claim 1 wherein the layer is sufficiently thick to give the coated particles a diameter between about 25 nm and about 35 nm.

5. (Original) The embolic material according to claim 1 wherein the magnetically responsive cores comprise iron or an iron compound.

6. (Original) The embolic material according to claim 5 wherein the magnetically responsive cores comprise magnetite (Fe.sub.3O.sub.4).

7. (Original) The embolic material according to claim 5 wherein the magnetically responsive cores comprise hematite (Fe.sub.2O.sub.3).

8. (Original) The embolic material according to claim 1 wherein the magnetically responsive cores include a radiopaque material.

9. (Original) The embolic material according to claim 1 wherein the non-magnetically responsive layer comprises a polymer backbone wherein each repeat unit of the polymer backbone is bonded to a long chain polymer and an anchor group, creating a plurality of long chain polymers and anchor groups on the polymer backbone.

10. (Original) The embolic material according to claim 9 wherein the polymer chains comprise poly(propylene glycol).

11. (Original) The embolic material according to claim 10 wherein the polymer chains include a carboxyl group anchoring the chains to the core.

12. (Original) The embolic material according to claim 9 wherein the polymer chains include a carboxyl group anchoring the chains to the core.

13. (Original) The embolic material according to claim 1 wherein the non-magnetically response layer comprises a polymer backbone with long chain polymers bonded to polymer repeat units and anchor groups bonded to different repeat units, creating a plurality of long chain polymers and anchor groups on the polymer backbone.

14. (Original) The embolic material according to claim 13 wherein the polymer chains comprise poly(propylene glycol).

15. (Original) The embolic material according to claim 13 wherein the backbones comprise carboxyl groups anchoring the backbones to the cores.

16. (Original) The embolic material according to claim 13 further comprising radiopaque moieties on the backbones.

17. (Original) The embolic material according to claim 1 wherein magnetically responsive material comprises less than or equal to about 5% by volume of the embolic material.

18. (Original) The embolic material according to claim 1 further comprising radiopaque particles.

19. (Original) The embolic material according to claim 18 wherein the radiopaque particles comprise gold cores of between about 7 and about 15 nm in diameter.

20. (Original) The embolic material according to claim 19 wherein the radiopaque particles comprise a non-magnetically responsive layer around the gold cores.

21. (Previously Presented) The embolic material according to claim 20 wherein the non-magnetically responsive layer comprises a plurality of hydrophobic polymer chains anchored to the cores of magnetically responsive material.

22. (Previously Presented) The embolic material according to claim 21 wherein the hydrophobic polymer chains comprise poly(propylene glycol).

23. (Original) The embolic material according to claim 22 wherein the polymer chains include a thiol group anchoring the chains to the gold cores.

24. – 35. (Cancelled)

36. (Currently Amended) A magnetically responsive embolic containing coated

magnetic particles for which the magnetic core average diameter is between 5 and 15 nm, where an outer portion of the coating includes cleavable hydrophobic polymer chains, and the coating thickness buffers the magnetic interactions so that the presence of an externally applied magnetic field will not cause a substantial departure of the embolic from a uniform mixture of its constituents.

37. (Original) The embolic of claim 36 in which the embolic is sufficiently self coherent that it will not separate in or at the surface of an aneurysm when the blood is flowing past at a velocity up to 80 cm/sec.

38. (Original) The embolic of claim 37 in which the magnetic core average diameter is between 5 and 30 nm diameter.

39. (Original) The embolic of claim 38 in which the embolic is sufficiently self coherent that it will not separate in or at the surface of an aneurysm when the blood is flowing past as a velocity up to 150 cm/sec.

40. (Previously Presented) The embolic material of claim 22 wherein the non-magnetic coating comprises a thick polymer coating having long chains that provide a coating thickness of at least 10 nanometers, which thickness creates a physical barrier that prevents the close approach of the plurality of magnetically responsive particles and lessens the interparticle force of a pair of repulsive magnetically responsive particles.